Introduction to Internet of Things Assignment- Week 2

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15 Total marks: 15 X 1= 15

QUESTION 1:

The full form of MQTT is

a. Message Queue Telephone Transmission
b. Message Query Telemetry Transport
c. Message Queue Telemedicine Transport
d. None of these

Correct Answer: d. None of these

Detailed Solution: The full form of MQTT is Message Queue Telemetry Transport.

See lecture 6 (Basics of IoT Networking – Part II) @ 01:51

QUESTION 2:

Which of the following is NOT a method in MQTT?

a. Break
b. Stick
c. Run
d. All of these

Correct Answer: d. All of these

Detailed Solution: Following are the methods in MQTT –

a. Connect
b. Disconnect
c. Subscribe
d. Unsubscribe
e. Publish

See lecture 6 (Basics of IoT Networking – Part II) @ 06:18

QUESTION 3:

Which of the following is/are component/components of MQTT?

a. Publishers
b. Subscribers
c. Brokers
d. All of these

Correct Answer: d. All of these

Detailed Solution: The three components of MQTT are –
a) Publishers
b) Subscribers
c) Brokers

See lecture 6 (Basics of IoT Networking – Part II) @ 04:50

QUESTION 4:

State whether the following statement is true or false.

SMQTT is an extension of MQTT which uses lightweight attribute based encryption. It has three main stages.

a. True
b. False

Correct Answer: b. False

Detailed Solution: SMQTT is an extension of MQTT which uses lightweight attribute based encryption. It has four main stages.

See lecture 6 (Basics of IoT Networking – Part II) @ 13:45

QUESTION 5:

The OSI model has _____ layers.

a. 6
b. 8
c. Both (a) and (b)
d. None of these

Correct Answer: d. None of these

Detailed Solution: The OSI model is a conceptual framework that divides any networked communication system into seven layers.

See Page number – 10, Chapter - 1, Book - Introduction to IoT, Authors – Sudip Misra, Anandarup Mukherjee, and Arijit Roy, Publisher – Cambridge University Press, Edition – 1 (2021)

QUESTION 6:

The two sub-layers of CoAP are -

a. Messaging and Holding
b. Messaging and Backoff
c. Messaging and Teardown
d. None of these

Correct Answer: d. None of these

Detailed Solution: CoAP has two sub-layers which are –
a) Messaging
b) Request/response

See lecture 7 (Basics of IoT Networking – Part III) @ 04:44

QUESTION 7:

What is the full form of AMQP in the context of IoT protocol?

a. Another Message Queuing Protocol
b. Anchored Message Queuing Protocol
c. Adjoint Message Queuing Protocol
d. None of these

Correct Answer: d. None of these

Detailed Solution: AMQP stands for Advanced Message Queuing Protocol.

See lecture 8 (Basics of IoT Networking – Part IV) @ 0:41

QUESTION 8:

XMPP uses the _____ architecture.

a. Publish-subscribe
b. Client-server
c. Both (a) and (b)
d. Neither (a) nor (b)

Correct Answer: b. Client-server

Detailed Solution: XMPP uses the client-server architecture.

See lecture 7 (Basics of IoT Networking – Part III) @ 12:03

QUESTION 9:

How many message delivery guarantee modes are there in the AMQP protocol?

a. 2
b. 3
c. 4
d. None of these

Correct Answer: b. 3

Detailed Solution: There are three message delivery guarantee modes in the AMQP protocol.

a. At-most-once
b. At-least-once
c. Exactly-once

See lecture 8 (Basics of IoT Networking – Part IV) @ 11:32

QUESTION 10:

Which of the following is/are NOT an AMQP frame type?

a. Open
b. Close
c. Random
d. None of these

Correct Answer: c. Random

Detailed Solution: Open, close, and end are valid frame types of the AMQP protocol.

See lecture 8 (Basics of IoT Networking – Part IV) @ 06:34

QUESTION 11:

State whether the following statement is true or false.

Statement: IEEE 802.15.5 was developed for low data rate monitoring and control applications and extended life low power communication uses.

a. True
b. False

Correct Answer: b. False

Detailed Solution: IEEE 802.15.4 was developed for low data rate monitoring and control applications and extended life low power communication uses

See lecture 9 (Connectivity Technologies – Part-I) @ 04:15

QUESTION 12:

Which of the following is/are exchange types in AMQP?

a. Direct
b. Indirect
c. Both (a) and (b)
d. None of these

Correct Answer: a. Direct

Detailed Solution: The AMQP exchange types are –

a) Direct
b) Fan-out
c) Topic
d) Header

See lecture 8 (Basics of IoT Networking – Part IV) @ 08:56

QUESTION 13:

State whether the following statement is True or False.

Statement: The IEEE 802.15.4 operates in ISM band.

a. True
b. False

Correct Answer: a. True

Detailed Solution: The IEEE 802.15.4 operates in the ISM band.

See lecture 9 (Connectivity Technologies – Part-I) @ 02:57

QUESTION 14:

The networking topologies supported in the IEEE 802.15.4 are -

a. Only Star
b. Star and Mesh
c. Only Mesh
d. None of these

Correct Answer: b. Star and Mesh

Detailed Solution: The networking topologies defined in IEEE 802.15.4 are star and mesh.

See lecture 9 (Connectivity Technologies – Part-I) @ 08:56

QUESTION 15:

State whether the following statement is True or False.

Statement: Generation of Route Requests (RREQs) by a LOADng Router for discovering a route to a destination is a valid operation of the LOADng routing protocol.

a. False
b. True

Correct Answer: b. True

Detailed Solution: Generation of Route Requests (RREQs) by a LOADng Router for discovering a route to a destination is a valid operation of the LOADng routing protocol.

See lecture 10 (Connectivity Technologies – Part-II) @ 12:40

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